

**Texas Commission on Environmental Quality**  
**Surface Water Quality Monitoring Program**

## Benthic Macroinvertebrate Data Reporting Form

RTAG#				REGION		EMAIL-ID:				
STATION ID				SEGMENT		SEQUENCE		COLLECTOR		
								DATA SOURCE		

## Station Description

**Composite - Most biological samples will be type Both**

**COMPOSITE SAMPLE**

COMPOSITE CATEGORY: T=Time S=Space B=Both

<div style="border: 1px solid black; height: 20px; width: 40px; margin: 0 auto;"></div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>M</span><span>M</span><span>D</span><span>D</span><span>Y</span><span>Y</span><span>Y</span><span>Y</span> </div> <p>START DATE</p>	<div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>H</span><span>H</span><span>M</span><span>M</span> </div> <p>START TIME</p>	<div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span></span><span></span><span></span><span></span> </div> <p>START DEPTH (SHALLOWEST)</p>	<div style="border: 1px solid black; height: 20px; width: 40px; margin: 0 auto;"></div> <p>M = meters F = feet</p>
<div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>M</span><span>M</span><span>D</span><span>D</span><span>Y</span><span>Y</span><span>Y</span><span>Y</span> </div> <p>END DATE</p>	<div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>H</span><span>H</span><span>M</span><span>M</span> </div> <p>END TIME</p>	<div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span></span><span></span><span></span><span></span> </div> <p>END DEPTH (DEEPEST)</p>	<div style="border: 1px solid black; height: 20px; width: 40px; margin: 0 auto;"></div> <p>M = meters F = feet</p>

### PARAMETRIC DATA

Enter the codes and values appropriate for this sample. Code (<) if less than value, and (>) if greater than value, other wise leave this column blank. Continue if necessary, on additional worksheets. Codes to describe the benthic sampling effort are listed on the back. Benthic data must be submitted with a Habitat Assessment.

[illegible]

## Benthic Macroinvertebrate Parameter Codes

**NOTE: Measurements reported in metric units**

**\*\* Indicates Parameter Measured at Sample Point (e.g. riffle from which benthic sample is collected)**

Quantitative Benthic Sample Descriptors			
89899	Biological Data Reporting Units (Values: 1= number of individuals from sub-sample; 2 = number of individuals/ft <sup>2</sup> ; 3 = number of individuals/m <sup>2</sup> ; 4 = total number in kicknet)	89946	Mesh size, any net or sieve (diagonal measurements) for benthic collection (cm)
89901	Surber Sampler Effort, area sampled (m <sup>2</sup> )	89961	Ecoregion (Texas Ecoregion Code)
89935	Ekman Sampler Effort, area sampled (m <sup>2</sup> )	84161	Stream Order
89934	Petersen Sampler Effort, area sampled (m <sup>2</sup> )	90005	Benthos Sampled--No Organisms Present
89933	Hester-Dendy Duration (days)	90055	Total Taxa (Taxa Richness), Benthos # Taxa
89950	Benthic Sampler (1=Surber, 2=Ekman, 3=kicknet, 4=Petersen, 5=Hester-Dendy)	90056	Total # of Diptera Taxa
89975	Area of snag surface sampled (m <sup>2</sup> )	90057	Total # of Ephemeroptera Taxa
**89921	Percent undercut bank at sample point (%)	90058	Total # of Intolerant Taxa
**89922	Percent overhanging brush at sample point (%)	90060	EPT Taxa (% of community)
**89923	Percent gravel substrate at sample point (%)	90062	Chironomidae (% of community)
**89924	Percent sand substrate at sample point (%)	90066	Tolerant Taxa (% of community), Benthos
**89925	Percent soft bottom at sample point (%)	90020	Benthic Grazers (% of community)
**89926	Percent macrophyte bed at sample point (%)	90025	Benthic Gatherers (% of community)
**89927	Percent snags and brush at sample point (%)	90030	Benthic Filterers (% of community)
**89928	Percent bedrock at sample point (%)	90067	Dominance (3 Taxa) (% of community)
RBAP Benthic Sample Descriptors			
89899	Biological Data Reporting Units (Values: 1= number of individuals from sub-sample; 2 = number of individuals/ft <sup>2</sup> ; 3 = number of individuals/m <sup>2</sup> ; 4 = total number in kicknet)	89946	Mesh size, sieve (diagonal measurements) (cm)
89950	Benthic Sampler (1=Surber, 2=Ekman, 3=kicknet, 4=Petersen, 5=Hester-Dendy)	89961	Ecoregion (Texas Ecoregion Code)
89902	Dip Net Effort, area swept (m <sup>2</sup> )	84161	Stream Order
89903	Kicknet Effort, area kicked (m <sup>2</sup> )	90005	Benthos Sampled--No Organisms Present
89904	Kicknet Effort, minutes kicked (min.)	90055	Total Taxa (Taxa Richness), Benthos, # Taxa
89905	Snags and Shoreline Sampling Effort, minutes picked	90008	EPT Taxa Abundance (# Taxa)
89906	Number of individuals in benthic RBA sub-sample (± 100)	90007	Biotic Index (HBI)
89950	Benthic Sampler (1=Surber, 2=Ekman, 3=kicknet, 4=Petersen, 5=Hester-Dendy)	90062	Chironomidae (% of community)
**89921	Percent undercut bank at sample point (%)	90042	Dominant Taxon, Benthos (% of community)
**89922	Percent overhanging brush at sample point (%)	90010	Dominant Functional Feeding Group (% of community)
**89923	Percent gravel substrate at sample point (%)	90036	Benthic Predators (% of community)
**89924	Percent sand substrate at sample point (%)	90050	Ratio of Intolerant: Tolerant Taxa
**89925	Percent soft bottom at sample point (%)	90069	% of Total Trichoptera as Hydropsychidae
**89926	Percent macrophyte bed at sample point (%)	90052	Total # Non-insect Taxa
**89927	Percent snags and brush at sample point (%)	90025	Benthic Collector-Gatherers (% of community)
**89928	Percent bedrock at sample point (%)	90054	% of Total # as Elmidae (% of community)